For Wilfrid.

From "Passive & Voice" Typol. Studies in Lang 16.
Ed. Masayoshi Shibatani 1988
John Benjamins Publ. Co.

Passive in Burushaski

Yves-Charles Morin and Étienne Tiffou
Université de Montréal

acc no. 383

1. Introduction

The analysis of passive constructions in Burushaski takes on a special importance as it has been specifically claimed that "there is no syntactic passive in Burushaski" (Bashir 1985:5).[1] More generally it has been assumed or implied in some recent typological studies that passive and ergative constructions are mutually exclusive.

Tchekhoff (1978:33ff) gives a definition of the ergative construction which excludes the possibility for a verb to be found in both constructions.[2] Other authors propose definitions of passivation which would exclude it in languages having an ergative construction. Thus Shibatani (1985:834ff) argues against an interpretation of passivation as a promotion of nonagents into main topics (cf. Givón 1979:185) or as a means by which the speaker expresses the patient's point of view (cf. Okutsu 1983:33), by noting that passives, then, should not be found in languages with an ergative construction: "Another, potentially more serious problem with Okutsu's and Givón's characterizations has to do with the fact that even...ergative languages may exhibit passive constructions."

Burushaski is regularly identified as an ergative language, i.e. one in which a transitive finite verb normally heads an ergative construction[3] and we have argued elsewhere that most of these verbs may also head a distinct passive construction (Morin and Tiffou, 1983). In this paper, we examine in more detail the properties of Burushaski passives and how they relate to other prototypical characterizations of this construction.

For this study, we will rely exclusively on the dialect spoken in Yasin. We adopt, as a rule, the general morphological analyses of Lorimer (1937), and more extensively of Berger (1974) (cf. also Tiffou, 1977, 1984; and Tif-

fou and Pesot, 1986). The data for this analysis have been gathered in the course of three distinct field trips.[4] We have isolated three hundred or so verbs recorded in previous works — to which we have been able to add but a few[5] — and asked our informants to build small sentences which would exemplify causatives, affectives and passives for each of them. Later work on Hunza Burushaski indicates that similar forms exist in this dialect, and share the same large characteristics as those of Yasin, but we were not able to make a systematic investigation of them.[6]

This study will show that there exist two different constructions which largely conform to the prototype presented by Shibatani, which we will call 'passive' and 'pathetive'. The organization of the paper is as follows. We present first some of the characteristics of the ergative construction (Section 2) and of causatives and affectives (Section 3), which are relevant to the present study. Then follows the description of passive and pathetive constructions (Sections 4 to 8), which we discuss later (Section 9).

2. The ergative construction in Burushaski

2.1. Typically, the grammatical subject of a transitive verb is an NP marked with a specific ergative case[7] while the subject of intransitive verbs, as well as the object of transitive verbs, are in the absolutive case (morphologically unmarked) as appears in the examples (1) below:[8]

(1) a. *ne* *hír-e* *phaló* *bók-i*
the MASC man-ERG seed PL ABS SOW PRET-3SG MASC SUBJ
'The man planted the seeds'

b. *ne* *hir* *yálṭ-i*
the MASC man ABS yawn PRET-3SG MASC SUBJ
'The man yawned'

Assuming most workable definitions of 'ergative construction', sentences headed by transitive verbs such as (1a) will qualify as instances of such construction. For Dixon (1979:60ff), Burushaski shows ergative characteristics because the case marking in sentences such as (1) groups together intransitive subjects and transitive objects and sets apart transitive subjects. Mel'čuk's (1978; 1979:55-57) more restricted definition also applies because the subject of the transitive verb in (1a) is not expressed by the absolutive case (the case for citation forms in Burushaski) *and* expresses the causer or the agent.[9]

2.2. The presentation above assumes a previous identification of what constitutes the grammatical subject of a sentence. Here again, most workable definitions would converge on the same NP in Burushaski, whether it be the syntactic-semantic definition by Dixon (1979:108) in which a subject is either the "only obligatory NP in an intransitive clause" or "the NP in a transitive clause which can be the agent", the functional definition by Martinet (1959, 1962) where the subject is the obligatory verb determinant, or the prototypical definition of Mel'čuk (1979) where it is the NP most similar to the (only) NP of an indicative clause headed by a verb having exactly *one* thematic argument.

Verbs may contain up to three affixes which cross-reference different NPs in the sentence or act as substitutes for such NPs. All finite verbs necessarily have a suffix which agrees with the subject (either NP or implicit),[10] and in some verbs this may be the only form of agreement, as in *bók-i* and *yálṭ-i* in (1) above. Some verbs also have a prefix which either represents an affected participant (for affective verbs, see Section 3) or else agrees with the highest complement NP in the following hierarchy: (a) Dative complement, (b) Object, (c) Subject;[11] e.g. *ma-híl-č-a* '2PL COMPL-dip-FUT-1SG SUBJ = (I) will dip (you)', or *gu-wár-a* '2SG COMPL-tire PRET- 2SG SUBJ = (you) are tired'. Finally, some verbs may have yet another suffix when the absolutive NP (or the corresponding implicit form) is plural; this suffix is more or less optional; thus a variant of *ma-híl-č-a* is *ma-híl-ja-č-a* '2PL COMPL-dip-PL-FUT-1SG SUBJ'.[12] Whether a verb takes a complement prefix and/or a plural suffix is mostly unpredictable and has to be specified in the lexicon.[13]

2.3. The lexical representation of a verb must contain a list of its stems, and for each of them specifications showing whether or not it is preceded by a complement prefix. For instance, the dictionary would contain the two stems *bók-* (PRET) and *bókič-* (PRES) of the verb 'to sow', or the two stems *yálṭ-* (PRET) and *yálč-* (PRES) of 'to yawn'. These two verbs do not take a complement prefix, unlike the following ones (we add a hyphen before the stem of such verbs): *-híl-* (PRET)/*-hílč-* (PRES) 'to dip', *-wár-* (PRET)/*-wárč-* (PRES) 'to be tired'. The present stem is partly predictable from the past one (affixation of one of the suffixes *-č-*, *-ič-*, or *-ṣ-*, palatalization of a previous consonant, etc.). Many verbs, however, are characterized by extensive suppletion. The complement prefix may belong to four different series: unstressed (*a, gu, i, ...*), high stressed (*á, gú, í, ...*), low stressed (*á, gó, é, ...*), and long stressed (*áa, góo, ée, ...*). The choice between the series is often not

predictable and must also be lexically specified. Following Berger (1974), the stem-initial hyphen will be diacritically marked as follows: –, ⸗, ⸗, ⸗ (respectively unstressed, high stressed, low stressed, and long stressed).

This representation must also contain a predicate argument structure which specifies the semantics of the verb, and in particular the number of its thematic arguments and their semantic roles, e.g. the lexicon must include information specifying that *bók-* has two thematic arguments 'SOW <X, Y>', where X is an 'agent' and Y a 'patient'. Finally it must make diathesis explicit, i.e. show how X and Y are encoded in the sentence (the nature of the phrases corresponding to the thematic roles, their positions with respect to the verb and/or their case marking, and their grammatical functions). In this example, the lexicon must specify that X corresponds to an NP marked for the ergative, which is the grammatical subject of the sentence, and Y to an NP in the absolutive case, which it is the grammatical object of the sentence. Word order in Burushaski, however, is completely irrelevant, except for the verb which must be sentence-final. Following Bresnan (1982b), we will take the grammatical functions to be primitives, from which the configuration and/or case marking are derived. The diathesis can thus be expressed directly within the predicate argument structure as follows: 'SOW <(SUBJ), (OBJ)>'.

We (tentatively) suggest the following rules for case marking:

a. NP Erg is SUBJ iff the sentence has an OBJ
b. NP Abs is SUBJ
c. NP Abs is OBJ

These rules simply say that an ergative NP may be interpreted as a subject if and only if the sentence has an OBJ, and that an absolutive NP may be interpreted as either the subject or the object. Assuming some simple well-formedness conditions, i.e. that a sentence must have precisely the subcategorizing complements indicated in the predicate argument structure of its head verb and no more, these three rules completely determine the case assignment of Buruṣhaski for all the relevant cases (cf. Kaplan and Bresnan, 1982).

2.4. Several diatheses may be assigned to the predicate argument structure of the same verb, which thus define different constructions for a given verb. One of the diatheses can be said to be 'basic' and the others described in how they differ from the basic one. We will assume here that the ergative

construction is basic for the transitive verbs which allow it. The thematic argument associated with the SUBJ and OBJ in the basic construction will be called 'a[cting]-agent' and 'a[cting]-patient' respectively because their thematic role is typically that of agents and patients.

Absolute constructions such as *John eats* in English can be said to involve a predicate argument structure 'EAT <(SUBJ), Ø>' in which the a-patient is not encoded. It formally relates to that of the basic transitive verb in *John eats spinach*, i.e. 'EAT <(SUBJ), (OBJ)>', by replacing (OBJ) by Ø. Not all correspondences need be that simple, they may involve (i) phonological and morphological changes to the stem (through affixation or otherwise), (ii) semantic changes to the predicate,[14] (iii) changes in the grammatical functions associated with the thematic arguments, and/or (iv) changes of syntactic status. We will refer to the verb heading a specific construction by the name of that construction. Thus in English the absolute verb *to eat* is identical to the active transitive verb *to eat* except for its diathesis. On the other hand, not only is the diathesis of the passive participle *eaten* different from that of the active transitive *to eat*, but so are its phonological shape, its syntactic status (it is a finite verb which requires an auxiliary), etc.

The Burushaski passive and pathetive constructions examined here can all be characterized as involving the assignment of the function SUBJ to the a-patient of a verb whose basic construction is ergative (i.e. the replacement of the function OBJ by SUBJ in the basic diathesis). Passivation and pathetivation may involve other changes in the diathesis and/or in the phonological and morphological shape of the (basic) verb, as we will see later. First we will briefly describe two other very productive processes: causation and affectivation, to highlight properties that are relevant to this study (Section 3).

Before, however, it should be stressed that Burushaski does not as a rule use the absolute construction. Sentences such as (2) below do not qualify as such:

(2) *ne* *hír-e* *ṣú-i*
the MASC man-ERG eat PRET-3SG MASC SUBJ
'The man ate (it/them)'

If the diathesis in (2) were 'EAT <(SUBJ), Ø>', one would expect the subject to be in the absolutive case (cf. the rules of case marking given above). One must assume in such sentences some (semantically vague) implicit

object. It must be recalled that Burushaski freely uses implicit subjects or complements for non salient thematic arguments (anaphoric or indefinite). Non salient objects need not have any morphological reflexes in a sentence, unlike subjects which are necessarily indicated at least through subject agreement, as in (3):

(3) *a-kírmin-um* *ba-n*
NEG-write PRET-PTCPL be-3PL HUM SUBJ
'They did not write it/it's not written'

Sentence (3) has two distinct interpretations, depending on the context of its utterance. It corresponds to a regular English active sentence when the subject is anaphoric and roughly to an English passive sentence when it is indefinite.

3. Some aspects of causation and affectivation

Causation and affectivation are two processes that are intimately tied together in Burushaski, the present characterization of which is only tentative. Causatives correspond to the English expressions with the operator verb 'to make' as in *I made him leave*. Affectives are benefactive/adverse forms which correspond only imperfectly to the PP headed by 'for', 'on', 'against' as in *I did it for him, he did it on me, he does it against me*. Affectives only imply that someone was somehow affected by the events reported in the sentence. These two processes may be analyzed as morphological operations which apply to a basic verb and add a thematic argument, as in the following sentences:

(4) a. *ne* *hír* *gučá-yi*
the MASC man-ABS go-to-bed PRET-3SG MASC SUBJ
'The man went to bed'

b. *ne* *hír-e* *Ø-yúu*
the MASC man-ERG his-son PL ABS
ó-guča-yi
3PL MASC COMPL-CAUS go-to-bed PRET-3SG MASC SUBJ
'The man put his sons to bed'

(5) a. *ne* *hír-e* *čái* *phák-i*
the MASC man-ERG tea ABS share PRET-3SG MASC SUBJ
'The man shared the tea'

b. *ne* *hír-e* *jáa čái* *áa-phak-i*
the MASC man-ERG my tea ABS 1SG COMPL-AFF share PRET-3SG MASC SUBJ
'The man took some of the tea that was in my cup'

In both cases, there is a phonological/morphological change in the stem. Causatives normally have a low stressed complement prefix, thus to the basic intransitive verb *gučá-* 'to go to bed' corresponds the causative form *=guča–* 'to put to bed'. These prefixes may sometimes be followed by a specific causative marker *-s-* before some (arbitrary) stems, e.g. to the basic verb *gáarc-* 'to break (int.)' corresponds the causative *=skarc–* 'to break (tr.)'. Affectives regularly have a long (stressed) complement prefix, e.g. to the basic ergative verb *phák-* 'to share' corresponds the affective form *=phak–* 'to share (on s.o.)'.

It is not sufficient that there be a beneficiary in some event to require an affective form. Simple benefactives are simply marked with an adjunct dative complement, as in (6):

(6) *ne* *hír-e* *góo-γa* *šée* *pháq-i*
the MASC man-ERG you-DAT wool PL ABS card PRET-3SG MASC SUBJ
'The man carded the wool for you'

There are apparently no valence restrictions on these two morphological operations: both intransitive and ergative verbs may constitute valid bases for either constructions. Causatives and affectives do not exclude each other, and may also be pathetive, as we will see later (Section 8). Causation often implies some form of affect on the causee which calls then for an affective form, as in (7) below:

(7) *ne* *hír-e* *góo-γa* *šée*
the MASC man-ERG you-DAT wool PL ABS
góo-phaq-i
2SG COMPL-AFF card PRET-3SG MASC SUBJ
'The man made you card the wool'

It is not necessarily obvious in sentence (7) that the primary meaning is one of causation; one could also argue that it is essentially one of affectivation, causation being only one of the modality through which the affect could take place.

To conclude these remarks on causation and affectivation, it must be stressed that these processes are partly lexical. There are verbs that are semantically and morphologically causative or affective which no longer can

be derived synchronically from other simpler verbs. One example of lexicalized causative verb is *-sqan-* 'to make someone weak/tired', as there are currently no basic verb **-γán-* from which it could be derived (although there exists a related verb *du-γán-* 'to be worn out' which shows that *-γán-* probably once existed). An example of lexicalized affective verb is *-l-* 'to prick' as in *čaş áali* 'the thorn pricked me' (there is even less evidence for a former basic verb **-l-* than in the previous case).

4. Unprefixed passives

4.1. If ergative verbs as a rule do not have absolute counterparts, there nonetheless frequently corresponds to them an intransitive form, as exemplified in (8):[15]

(8) a. *ne hír-e phaló bók-um bá-i*
the MASC man-ERG seed Y PL ABS SOW PRET-PTCPL be-3SG MASC SUBJ
'The man has planted the seeds'

b. *phaló bók-um b-icá*
seed Y PL ABS SOW PRET-PTCPL be-3PL Y SUBJ
'The seeds have been planted'

As discussed above, the diathesis of the ergative verb in (8a) can be represented by the following predicate argument structure: 'SOW <(SUBJ), (OBJ)>'. In (8b), the a-patient Y of the predicate 'SOW <X, Y>' is now a subject, as indicated by the verb agreement, and the agent X is not expressed; its diathesis is therefore 'SOW <Ø, (SUBJ)>'. Absolute constructions can be characterized by the elimination of one of the predicate arguments of the corresponding basic construction *without* modifying the grammatical functions associated with the other arguments. In the construction exemplified in (8b), one argument is indeed suppressed, but the grammatical function associated with the second is altered from OBJ to SUBJ. It qualifies as a passive construction according to relational grammar (Perlmutter and Postal, 1977) and corresponds to the form given by lexical functional grammar to English passivation (Bresnan, 1982b). We will see later (Section 9) that it also corresponds to a large extent to the passive prototype proposed by Shibatani (1985). To distinguish passives as in (8) from closely related forms discussed in the next section, we will refer to them as 'unprefixed passives'.

4.2. Verbs allowing unprefixed passives include the following:

bisárk-	'to harvest (a crop)'	(?)*gál-*	'to break'	*har-*	'to plough for (a crop)'
bók-	'to sow'	*gan-*	'to spin'[16]		
burú-	'to knead (dough)'	*gámi-*	'to pay back (a debt)'	*-ser-*	'to sharpen'[17]
capán-	'to sew'			*sún-*	'to screen (wheat)'
capáşkin-	'to wring (linen)'	*gišá-*	'to weave'	*túl*	'to saddle'
daldén-	'to sift'	*γé-*	'to steal'	*thí-*	'to pour (out)'
gacéli-	'to irrigate (a field after harvest)'	(?)*γorc-*	'to sink'		
		ţoţór-	'to gnaw'		

Our corpus of ergative verbs with three arguments is relatively limited and most of them were accidentally omitted in this study. However, a passive is attested for the verb *-sálgin-* 'to engage (the son's father is the agent)' as in (9):[18]

(9) a. *ne hír-e ḍakţár-e é-i Ø-yé-γa*
the MASC man-ERG doctor-GEN his-daughter ABS his-son-DAT
mu-sálgin-um bá-i
3SG FEM COMPL-engage PRET-PTCPL be PRES-3SG MASC SUBJ
'The man engaged the doctor's daughter to his son'

b. *é-i mu-sálgin-um*
his-daughter ABS 3SG FEM COMPL-engage PRET-PTCPL
b-u
be PRES-3SG FEM SUBJ
'His daughter has been engaged'

4.3. The predicates associated with these verbs typically have at least two arguments, one of which is unmistakably agent. This semantic characterization is common to both diatheses; in particular, it is retained in the passive construction, even though the agent is not expressed. In *phaló bókum bicá* 'The seeds have been planted', one expresses not only that the seeds were in the proper conditions to germinate and grow to maturity, but also that this is the result of an operation that involved an agent responsible for this state of affair, as far as we were able to determine. The only two possible exceptions are *gál-* 'to break' and *γorc-* 'to sink', where one could argue that the semantics of the intransitive verbs does not presuppose the intervention of any agent.

These two verbs are classical instances of 'changes of state' which in many other languages may have a double diathesis. Thus the basic meaning of *gál-* 'to break' could be that of a change of state, represented by a predicate with a single argument 'BREAK <(SUBJ)>', and the transitive meaning derived from it through a form of causation, e.g. 'CAUSE <(SUBJ), BREAK <(OBJ)>>'. This causative, however, is morphologically distinct from the causatives discussed in Section 3, which have a low (or long) stressed complement prefix, even when they correspond to changes of state as in the following examples:[19]

intransitive form		transitive form	
bapá	'to boil, to cook (intr.)'	*=spapa–*	'to boil, to cook (tr.)'
bu–	'to dry (up)'	*=spe–*	'to dry (off)'
čut=	'to drip (intr.)'	*=čut–*	'to drip (tr.)'
γás–	'to rot'	*=sqas–*	'to let (sth) rot'
γóltur–/γólturkin–	'to be turned over'	*=γoltur–/=γolturkin–*	'to turn (sth) over'
túr–	'to rip (of a seam) (intr.)'	*=ltur–*	'to rip (a seam) (tr.)'
pháan–	'to swell (up)'	*=phan–*	'to swell (tr.)'
šul=	'to fall (off)'	*=šol–/=šul–*	'to fell'.

4.4. We will resume the analysis of unprefixed passives in Section 6, after we examine the prefixed variant in the next section.

5. Prefixed passives

5.1. Many other verbs allow a double diathesis similar to the one examined above, but the passive form appears with a prefix *d-*, as exemplified in (10):

(10) a. *ne hír-e cel cá-m bá-i*
the MASC man-ERG water Y ABS impound PRET-PTCPL be-3SG MASC SUBJ
'The man has impounded the water'

b. *cel du-cá-m duá*
water Y ABS D-impound PRET-PTCPL be 3SG Y SUBJ
'The water is impounded'

The relationship between the diatheses in (10a) and (10b) is completely parallel to the one we observed in our discussion of unprefixed passive. If 'IMPOUND <(SUBJ), (OBJ)>' is the basic diathesis in (10a), the one of (10b), *viz.* 'IMPOUND <Ø, (SUBJ)>', is also obtained by erasing the a-agent and assigning the function SUBJ to the a-patient. The difference lies primarily in the overt presence of a morphological marker *d-*.

5.2. The verbs following this model include the following transitive verbs:

biráq-	'to dig'	*du-míraq-*
cá-	'to dam up, to impound (water)'	*du-cá-*
cécen-	'to rough down (timber)'	*du-cécen-*
čaγálṭ-	'to card (wool)'	*du-čáγalṭ-*
çúurk-	'to milk'	*du-çúurk-*
gaṭámur-	'to soften (hide)'	*du-káṭamur-*
gúrgún-	'to mill (on a stone)'	*du-gúrgun-*
=γušel–	'to spoil, to damage'	*do-γóšel-*
(?) *-híl-*	'to immerse, to soak'	*d-híl-*
hutén-	'to pour (e.g. corn), to spill'	*du-húten-* ('to be garnered')
=jal–	'to spread'	*du-jál-*
-kháči-	'to stable (cattle)'	*d=khači-*
kháka-	'to plough (a field) without sowing'	*du-kháka-*
khúruṭ-	'to open'	*du-khúruṭ-*
-hálṭ-	'to wash'	*du-hálṭ-*
kharcén-	'to cut up (sth)'	*du-khárcen-*
khokhór-, -khókhor-	'to gnaw'	*du-khókhor-*
(?) *-xár-*	'to split'	*du-xár-*
-xáurt-	'to scratch'	*du-xáurt-*
-xés-	'to tear, to slash'	*de-xés-*
-xóxomi-	'to tangle'	*do-xóxomi-*
-ltáali-	'to twist, to wind'	*du-ltáaḷi-*
-ltán-	'to pound (on a mortar)'	*du-ltán-*
(?) *=ltapi–*	'to make (flowers) fade'	*du-ltápi-*
-ltáask-	'to pull'	*du-ltásk-*
-ltáu-	'to lick (up)'	*du-ltáu-*
maltár-	'to rub (sth.) (on sth.), to brush over (sth.) (on sth.)'	*du-máltar-*
másul-	'to chew'	*du-másul-*
-móq-	'to pluck (poultry)'	*do-móq-*
móṣqo-	'to suck (sth)'	*do-móṣqo-*
-múkul-	'to wrap (sth.) (in sth.)	*do-mókul-*
-múruṭ-	'to caress, to wring'	*du-múruṭ-*
mút-	'to crumb (bread)'	*du-mút-*
phák-	'to serve out, to distribute'	*du-phák-*
(?) *pháalt-*	'to break (up) (sth.)'	*du-pháalt-*
pháq-	'to card (wool), to shred'	*du-pháq-*
-pháṭar-	'to peel, to skin'	*du-pháṭar-*
phúlt-	'to inflate, to revive (fire) by blowing'	*du-phúlt-*
-phús-	'to tie'	*du-phús-*
sésen-	'to clarify (butter)'	*du-sésen-*

-úrk-	'to hide (sth.)'	*du-úrk-*
yál-	'to water (field)'	*di-yál-*
-yáar-	'to pasture (cattle)'	*du-yáar-*
-yáu-	'to pick (flowers)'	*du-yáu-*
-yórtikin-	'to drag'	*du-yórtikin-*

As one can see, most of the ergative basic verbs have either no complement prefix or an unstressed one, the only exceptions being *=γušel–* 'to spoil, to damage', *=jal–* 'to spread' and *=ltapi–* 'to make (flowers) fade'. Most of the passive forms have no complement prefix, excepted *d-híl-* 'to be immersed, to be soaked' and *d=khači–* 'to be stabled'. In all the other cases, the prefix *d-* is followed by an 'epenthetic' vowel, whose value is usually predictable, but not always, cf. *de-xés-* vs. *du-cécen-*, *di-yál-* vs. *du-yáu-*. The factors conditioning the presence of the 'epenthetic' vowel probably are no longer phonological, as it is found even before a vowel as in *du-úrk-* 'to be hidden' (one might, however, suggest an initial phonological *w*, *-wúrk-* ~ *du-wúrk-*, as there is a productive process deleting *w* before *u* in the language). Finally stress differences are not pertinent, as *d-* normally requires the stress to fall on the following syllable.

The *d-* prefix, however, cannot be considered to be a passive marker, and its status in the language is less than obvious, as we now observe.

5.3. For most of the pairs /x/ : /d-x/ above, the relationship between the diatheses of both verbs is similar to that of *cá-* 'to impound' : *du-cá-* 'to be impounded'. In the diathesis of the second, the a-agent is Ø and the a-patient is SUBJ. In some cases, however, the relationship is different, in the sense that the semantics of the /d-x/ form is simpler than that of the morphologically simpler verb /x/. It could be the case of *d-híl-* 'to be(come) wet', *du-xár-* 'to split up, to bloom', *du-ltápi-* 'to fade (of flowers)', *du-pháalt-* 'to break away (intr.), to be undone'. In sentences such as *dukuhíla* 'you got wet', *gambúrimu duxáren* 'flowers bloomed', *gambúri dultápi* 'the flower faded', *cel dupháalti* 'the water broke away (as a result of snow melting in the spring, for instance)', the semantics of the verb probably does not require a two-place predicate. Just as in the case of *gál-* 'to break' or *γorc=* 'to sink' discussed previously, the ergative verb /x/ is semantically a causative form of the intransitive verb /d-x/, where *d-* has no passive interpretation.

5.4. Actually, the *d-* prefix is also found before bound stems, i.e. stems that cannot occur without it. For instance the stem *xótal-* appears only in the

verb *do-xótal-* 'to be covered (with)', as in (11a). One knows that *d(o)-* above is an instance of that prefix, because an affective form is possible, where *d-* is separated from the stem, as in (11b).

(11) a. *gúr-cum* *mal* *do-xótal-i*
wheat-ABL field Y ABS D-COVER PRET-3SG Y SUBJ
'The field is covered with wheat (the wheat is tall enough, to make the ground not visible)'

b. *ne* *hír-e* *Ø-yée*
the MASC man-ERG his-son ABS
d-ée-xotal-i
D-3SG COMPL-AFF COVER PRET-3SG MASC SUBJ
'The man covered his son'

Verbs with a bound stem such as *do-xótal-* may historically be related to an ergative — but no longer existing — verb **xotál-* 'to cover', cf. *du-γán–/d=γan-* 'to be worn out', *du-γáṭ-* 'to be picked up, to be chosen', *du-ltáaγaakin-* 'to be washed'. There are, however, intransitive verbs with a *d-* prefix which can hardly be interpreted as passives, e.g. *di-γárc-* 'to fall (of rain, snow)', *do-hánja-* 'to galop (intr.)', *du-hár-* 'to swell (intr.)'. Even those for which this semantic interpretation is possible, synchronically need no longer have the status of a passive-like form. In particular they may have causative (~ affective) forms: *d=xótal–* 'to cover' as in (11b), *d=sqan–* 'to wear out', *d=sqaṭ–* 'to choose', *d=ltaγaakin–* 'to wash', which semantically correspond to the missing active ergative form, and which show that speakers fail to perceive such verbs as a passive form of the bound stem. Note that the prefix *d-* in causative forms can obviously not be considered a passive marker.

5.5. A weaker hypothesis that the *d-* prefix is a marker of intransitivity must also be rejected. Not only does it appear in the previously mentioned causative (~ affective) verbs, and in ergative verbs before a bound stem such as *du-γáres-* 'to ask (s.o) (for sth.)', *du-háltal-* 'to roast, to fry (sth.)', but it may relate two intransitive verbs such as *xaráṭ-* and *du-xáraṭ-* which both mean 'to stick (onto sth.)' (with some differences of meaning that are not yet obvious), *γol=* and *do-γól-* 'to burn (intr.)', *túr-* and *du-ltúr* 'to be undone, to be unseamed, etc.' or two causative forms such as *=ltur-* and *d=ltur–* 'to undo, to unseam, etc.'

DEPT. OF PHONETICS &
SCHOOL OF ORIENTAL AND AFRICAN STUDIES
THORNHAUGH STREET
RUSSELL SQUARE, LONDON WC1H 0XG

5.6. Finally, the original function of the prefix *d-* has considerably faded in some verbs. Speakers may reanalyze it as belonging to a new synchronically unanalyzable stem. For instance, *do-hóq-* 'to swell' may, for some of our informants, have two affective forms: the (probably) older form *d-̄hoq–*, as in *álči dáahoqi* 'it made my eye swell', or the new form where the complement prefix appears before the prefix *d–*: *-̄dohoq–*, as in *álči áadohoqi*. The incorporation of a former *d-* prefix into the stem is also found in *d-̄c–* 'to close' whose causative is often *-̄dec–*, and is quite general for the operator verb *d-̄l–* 'to strike' which is now *-dél-* for most grammatical persons, e.g. *adéli* 'he stroke me', but whose original form is retained in 3PL MASC/FEM/X *dóli* 'he stroke them'.

5.7. Whatever the function or meaning of the prefix *d-* ,[20] it is clear i) that it is not essentially associated with the passive construction and ii) that its presence is not necessarily associated with some active morphological operation in the language. In other words, the difference between unprefixed and prefixed passives is not related to a difference of productivity between two competitive formation rules, but may simply be lexical.

6. Distribution of the two passives

In the last two sections, we have distinguished, because of their forms, unprefixed passives from prefixed ones. The two forms do not appear to be constrastive. Typically one verb will allow only one of the two passives, although in some cases there will not be complete agreement among our informants. A given informant may even accept both passives, but if there is a semantic difference between the two, it is not quite obvious (it may in the long run be associated with the distinction found in non-passive pairs such as *γol-̄/do–γól–* 'to burn'). The diathesis is the same for both passives: 'X<Ø, (SUBJ)>' if 'X <(SUBJ), (OBJ)>' is the diathesis of the ergative verb. It is thus likely that the two passives are just two variants of the same construction. In this section, we will be interested in the following three questions: (a) can one predict which of the two passives is associated with a given verb, (b) do all basic ergative verbs have one passive form, and (c) are there specific grammatical constraints on passives?

6.1. The answer to the first question appears to be negative. We have not been able to determine the factors governing the choice of passive for a given verb. The only generalization is simply numeric: prefixed passives are much more frequent. One of our informants allowed much more variation than the others, and could often use both passives freely for many verbs. It is possible that such variation is more general in the language than we have been able to determine through direct elicitation, because i) informants tend to favor clearly contrasting forms in such inquiry, and ii) there might be pragmatic factors allowing unprefixed passives, which we did not control.

6.2. The answer to the second question is that most basic ergative verbs can be passivized. In some rare cases, however, no passives were provided. We found again some limited variation in the answers of our informants, which once more suggests some pragmatic factors governing the usage of passives.

A representative list of the few transitive verbs without passive for most of our informants is the following:

-cu-	'to take away'	*damén-*	'to measure, to weigh (sth.)'
guá-	'to reach for (sth)'	*húnja-*	'to plait (hair)'
men-̄	'to drink (sth.)'	*-sárk-*	'to let (s.o., sth.) go'
-̄sel–	'to comb'		

As a rule, a passive is possible every time it corresponds to a change in the state of a patient. A good case at hand is *gaṭámur-* 'to caress, to soften (hide)'. When applied to something whose state is unchanged, e.g. a hand or a human being, only the active form is possible (which then is in the affected form), as in (12); when applied to a hide to describe a change of state, both active and passive constructions are possible, as in (13):

(12) *mo-rén* *móo-kaṭamur-i*
her-hand ABS 3SG FEM COMPL-AFF caress PRET-3SG MASC SUBJ
'He caressed her hand'

(13) a. *baṭ* *gaṭámur-i*
skin Y ABS caress PRET-3SG MASC SUBJ
'He softened the skin'

b. *baṭ* *du-káṭamur-um* *duá*
skin Y ABS D-soften PRET-PTCPL be 3SG Y SUBJ
'The skin has been softened'

If this constraint were general, it could explain why the verbs above do not passivize, as most of them do not imply a change in the state of the a-

patient (exceptions: *-sel-* 'to comb' or *húnja-* 'to plait (hair)'). It is, however, too strong, as it wrongly excludes many verbs where no changes of state are involved, e.g. *-úrk-* 'to hide (sth.)'. One could perhaps think of the passive construction as having a process/state/result orientation, rather than an actor one (after a distinction by Bashir, 1985).[21] In this case, the exceptions above would simply be pragmatic; in contexts which would favor the non-actor orientation, the passive construction would be possible. The apparent exceptional status of such verbs would only be a consequence of the unnaturalness of such contexts. (Actually, if passive forms of *damén-* 'to measure, to weigh (sth.)' were always rejected, one of our informants accepted an unprefixed passive of *-cán-* 'to count' in *kursímu cánum bíen* 'the chairs have been counted' which semantically is similar to *damén-*).

6.3. The answer to the third question is that the constraints on passives could also be aspectual. Some passives were said to be 'odd' in the present tense,[22] which implies a durative (non-perfective) aspect (cf. Tiffou and Pesot, 1986). Passive sentences in these cases appear then to refer to accomplished events rather than on-going ones. We have not been able to determine, however, how general the constraint is, except that it may apply both to prefixed and unprefixed passives.

The same aspectual constraint may also explain why passives may be used in the present with the particle *baş*, that Berger (1974: 42) analyzes as an auxiliary verb meaning 'must be'. Passive forms used with *baş* indicate that an event is not yet accomplished, which often implies that one should take measures to see that it is, cf. sentences (14b) and (15). These sentences were declared odd without *baş*, unlike (14a) for which a different tense is used. One will also note, that if *baş* is an auxiliary verb, it is nonfinite and may be followed by the verb 'to be' which agrees with the subject of the passive: *bi* in (14) and *duá* in (15).

(14) a. *ména* *du-gúrgun-um* *b-i*
apricot-nuts X SG ABS D-grind PRET-PTCPL be-3SG X SUBJ
'The apricot nuts have been ground up'

b. *ména* *du-gúrguy-um* *baş* *b-i*
apricot-nut X SG ABS D-grind PRES-PTCPL still be-3SG X SUBJ
'There still are some apricot nuts to be ground'

(15) *uş* *gámič-um* *baş* *duá*
loan Y ABS redeem PRES-PTCPL still be 3SG Y SUBJ
'There still is some money to pay back'

There might also exist some semantic constraints on the subject of passive verbs. In almost all of our collected data, the subject is non-human, either inanimate as in the examples above or animal as in (16). This, however, may simply be the result of our inquiry, as we have not directly controlled this parameter, and we have at least one example (17) where the subject of a passive is human.

(16) a. *mo* *gús-e* *biá* *çúurk-u*
the FEM woman-ERG COW X ABS milk PRET-3SG FEM SUBJ
'The woman milked the cow'

b. *biá* *du-çúurk-um* *b-i*
COW X ABS D-milk PRET-PTCPL be-3SG X SUBJ
'The cow is milked'

(17) a. *ne* *hír-e* *ja* *a-yórtikin-i*
the MASC man-ERG I ABS 1SG COMPL-drag PRET-3SG MASC SUBJ
'The man dragged me'

b. *du-yórtikin-a*
D-drag PRET-1SG SUBJ
'I was dragged'

As we will see in Section 8, pathetive verbs do not have human subjects, which would further distinguish them from passive ones. The meagre evidence we have now, however, can only be suggestive.

7. Mention of the agent in passive sentences

7.1. Various oblique complements may be used in simple sentences to indicate a more or less direct form of causation (instrument, responsability, causer, etc.). They may be marked with the instrumental case *-yaţe* or even the locative *-ce*, as in the examples below:

(18) a. *ne hir lahazí-yaţe du-ltápi-m bá-i*
the man sickness-INSTR D-impair PRET-PTCPL be-3SG MASC SUBJ
'The man is worn out by sickness'

b. *sáa-ce gamburí-mu du-xár-en*
sun-LOC flower X-PL D-bloom PRET-3PL X SUBJ
'The flowers bloomed in the sun'

In most cases, however, such oblique cases are marked with the ablative *-um/-cum*, as in the following example (see also sentence 11):

(19) *júu-cum* *a-s* *gáarc-i*
apricots-ABL my-heart X break PRET-3SG X SUBJ
'The apricots disgusted me
(lit. my heart broke because of (from) the apricots)'

7.2. All the passive verbs we examined before were typically characterized by the diathesis 'X <Ø, (SUBJ)>', i.e. one where the a-agent is not encoded. Oblique complements, as in the case of the simple sentences above, may probably also be used to indicate a form of causation, which in this case would normally correspond to the a-agent. We have not found any instances of such oblique complements in spontaneous texts. Sentences such as (20), that we artificially constructed, were deemed to be more or less acceptable by our informants, and in some cases, completely inacceptable, as in (21) for both animate and inanimate oblique complements:

(20) a. ?*khapún* *jáa-cum* *du-kán-um* *b-i*
spoon X ABS I-ABL D-bend PRET-PTCPL be-3SG X SUBJ
'The spoon has been bent by me'

b. ?*jáa-cum* *biá-nc* *du-kháči-en*
I-ABL COW X-PL ABS D-stable PRET-3PL X SUBJ
'The cows were stabled by me'

(21) **jáa-cum/tíṣ-cum* *phal-ó* *du-jál-i*
I-ABL/wind-ABL husk Y-PL ABS D-spread PRET-3PL Y SUBJ
'The husk has been scattered by me/the wind'

We may conclude from these examples that there are grammatical rules which interpret an ablative oblique complement as a causer/agent. This explains why in sentences such as (20), our informants were able to find the appropriate interpretation. Nonetheless, they did not find them excellent, probably because the active construction is simpler and much more appropriate in such cases.[23]

8. The pathetive construction

We became aware of some of the specific properties of what we are going to call 'pathetive construction' (after Mel'čuk, 1978) only after our field investigations. This implies that many tests were not made that could have helped us decide between alternate analyses.

8.1. In the pathetive construction, both the a-patient and the a-agent of a two-argument verb are syntactically encoded respectively as a subject and an oblique complement in the ergative; cf. the ergative sentence (22a) and the corresponding pathetive one (22b) below:

(22) a. *čúmu-sel-áŋ-e* *jáa* *gaṭú-nc* *xéša-m*
fish-needle Y-PL-ERG my cloth X-PL ABS tear PRET-PL-PTCPL
b-icá
be-3PL Y SUBJ
'The fish-hooks tore the clothes'

b. *čúmu-sel-áŋ-e* *jáa* *gaṭú-nc* *xéša-m*
fish-needle Y-PL-ERG my cloth X-PL ABS tear PRET-PL-PTCPL
b-ién
be-3PL X SUBJ
'The clothes were torn by the fish-hooks'

The agreement pattern indicates that the absolutive NP in (22b) is the grammatical subject as in the passive construction. The a-agent is marked for the ergative[24] and is thus morphologically identical to the subject a-agent of the ergative sentence (22a).

Pathetive verbs are seldom derived from basic verbs. The only two clear examples that we have are limited to the verbs *-xaúrt-* 'to scratch' and *-xés-* 'to tear, to slash'. They are, however, frequently derived from morphologically complex transitive verbs, i.e. causative verbs as in (23) or (24) or affective verbs as in (25):

(23) a. *garúmkuṣ-e* *γamú-mu* *d-ó-huk-ia-m*
heat Y-ERG ice X-PL ABS D-3PL X COMPL-CAUS melt PRET-PL-PTCPL
duá
be 3SG Y SUBJ
'The heat made the pieces of ice melt'

b. *garúmkuṣ-e* *γamú-mu* *d-ó-huk-ia-m*
heat Y-ERG ice X-PL ABS D-3PL X COMPL-CAUS melt PRET-PL-PTCPL
b-ién
be-3PL X SUBJ
'The heat made the pieces of ice melt'

(24) a. *tíṣ-e* *cigír-a* *ó-s-qorc-um*
wind Y-ERG goat X-PL ABS 3PL X PL COMPL-CAUS-sink PRET-PTCPL

duá
be 3SG Y SUBJ
'The wind made the goats (fall into the water and) sink'

b. *tíṣ-e* *cigír-a* *ó-s-qorc-um*
wind Y-ERG goat X-PL ABS 3PL X PL COMPL-CAUS-sink PRET-PTCPL
b-ién
be-3PL X SUBJ
'The wind made the goats (fall into the water and) sink'

(25) a. *tíṣ-e* *á-lči-mu* *d-áa-hoq-um*
wind Y-ERG my-eye X-PL ABS D-1SG COMPL-AFF swell PRET-PTCPL
duá
be 3SG Y SUBJ
'The wind made my eyes swell'

b. *tíṣ-e* *á-lči-mu* *d-áa-hoq-um*
wind Y-ERG my-eye X-PL ABS D-1SG COMPL-AFF swell PRET-PTCPL
b-ién
be-3PL X SUBJ
'The wind made my eyes swell'

In sentences (23) and (24) *d-huk-* 'to melt (tr.), to dissolve (sth) (into sth.)' is the causative form of *du-húk-* 'to melt (intr.), to dissolve (into sth.)' and *-sqorc-* 'to cause to sink' the causative form with the causative prefix *-s-* of *-γórc-/γorc-* 'to sink into water (intr.)'; in sentence (25) *d-hoq-* 'to make (sth.) swell' is the affective (and causative) form of *do-hóq-* 'to swell'. In our corpus, pathetive verbs have the following properties:

a. The a-agent is inanimate: (i) it may be a natural element like 'wind', 'water', 'dust' that may act directly, (ii) a product that can have indirect effects like 'drugs', 'wine', (iii) an abstract noun such as 'heat', 'hunger', or (iv) an instrument as in (22) or (26) below.

b. The a-patient cannot be human. Sentence (24b) becomes ungrammatical if one replaces *cigíra* 'goats' by *hurí* 'men', although the grammaticality of (24a) is unaffected by the same substitution.

The choice between the ergative or the pathetive construction may also be conditioned by pragmatic factors. Indeed, some of our informants showed a clear preference for the second when the two conditions above

were met. The others, however, always found both constructions equivalent.

(26) *thúr-e* *haγór-a* *d-ó-honja-m*
whip Y-ERG horse X-PL ABS D-3PL X COMPL-CAUS gallop PRET-PTCPL
b-ién
be-3PL X SUBJ
'The whip made the horses gallop'

If we take the property (a) above as a constraint requiring the a-agent in the pathetive construction to be inanimate, one can perhaps explain the relatively low number of basic transitive verbs found in this construction. Most of the verbs we examined in our discussion of unprefixed passives (Section 4.2) and prefixed passives (Section 5.2) involve a human activity. Nonetheless, some of these verbs could probably take an instrument as a-agent — a possibility that we have not tested.

8.2. The main question raised by the pathetive construction concerns its relation with the passive construction examined before. The oblique ergative complement in the pathetive construction corresponds to the ablative oblique complement in the passive construction, e.g. *jáacum* in sentences (20). The ablative oblique complements, however, are relatively unfrequent (or barely acceptable) in passive sentences. On the other hand, the ergative NP in pathetive sentences is used quite naturally.[25] One may thus make the hypothesis that the passive construction is simply a variant of the pathetive construction where the a-agent is not expressed, just as short passives in English, e.g. *John was surprised*, may be analyzed as a variant of long passives, e.g. *John was surprised by the gift*. There are three reasons to think that this is not the case.

First, the implied a-agent in passive sentences is not necessarily inanimate, e.g. in *túl-* 'to saddle/to be saddled' or *du-çúurk-* 'to be milked' the a-agent is normally human.

Second, the pathetive construction never calls for the prefix *d-*. In sentences such as (23b) or (25b), the prefix *d-* is not associated with the pathetive construction, but is idiomatic and also found in the ergative sentences (23a) and (25a) as well. Thus, one may contrast the pathetive verb *-xés-* 'to be torn' in (22b) and the passive verb *dé-xés-* 'to be torn'. This opposition, of course, is only valid for prefixed passives.[26]

Third, it is likely that the a-agent in pathetive sentences is obligatory.

We have not asked for the grammaticality of sentences such as (23-25) without a-agent: °*γamú-mu d-ó-huk-ia-m b-ién*, °*cigír-a ó-s-qorc-um b-ién*, or °*á-lči-mu d-áa-hoq-um b-ién*, so that this presumption should be further tested. Nevertheless, the fact that a prefixed passive *dé-xés-* 'to be torn, to be slashed' was required and the unprefixed *-*xés-* rejected by our informants suggests that the a-agent in sentence (22b) must be present. We will tentatively accept this conclusion here, i.e. that an a-agents is obligatory in the pathetive construction. This means that the rules for case marking discussed in Section 2.3 would have to include a new rule (d): NP Erg is OBL_{Agent}, i.e. has the grammatical function OBL, with the semantic role 'agent'.

9. Discussion

9.1. If we accept Shibatani's (1985:837) characterization of the passive prototype, i.e.:

a. Primary pragmatic function: Defocusing of agent.
b. Semantic properties:
   (i) Semantic valence: Predicate (agent, patient).
   (ii) Subject is affected.
c. Syntactic properties:
   (i) Syntactic encoding: agent → Ø (not encoded).
   patient → subject.
   (ii) Valence of P[redicate]: Active = P/n;
   Passive = P/n – 1.
d. Morphological property:
   Active = P;
   Passive = P[+passive].

we must conclude that what we have called here 'passive construction' conforms completely to this prototype, while the 'pathetive construction' is slightly less typical.

9.2. The pragmatic function is fully satisfied for the passive verbs, as the agent is not syntactically encoded (or is defocused by taking an oblique case in some unfrequent cases). Their semantic properties typically also conform to that of the prototype: the semantic valence of passive verbs typically includes an agent and a patient, and the argument encoded as the grammatical subject is affected. The syntactic properties also completely conform to

it, as the patient appears as the grammatical subject, and the agent is not normally syntactically encoded. The morphological properties are also compatible with that model, but here some discussion is required.

In his characterization of the passive prototype, Shibatani requires that passive verbs receive a passive marking, allowing them to be 'differentiated from typical topicalization by virtue of [their] morphological marking in the VP, whether as an auxiliary verb (e.g. English) or as an affix (e.g. Japanese)' (844). This marking need not be specific, thus the morphological marker *be -en* in English passives, is used elsewhere, as in *John is gone*, or *the island is uninhabited*. The prefix *d-* in prefixed passives, although it is found in non-passive verbs, thus qualifies as a morphological marker which distinguishes *du-cá-* 'to be impounded' from the ergative verb *cá-* 'to impound', for instance. One can also argue that unprefixed passives are morphologically distinct from the corresponding ergative verbs. Passive verbs have a typically intransitive diathesis, and in particular the subject suffix is co-indexed with the absolutive NP, contrary to ergative verbs whose diathesis requires the subject suffix to be co-indexed with the ergative NP. These morphological properties, therefore, also distinguish the passive verb *bók-* 'to be planted' from the ergative verb *bók-* 'to plant'.

Perhaps the most striking characteristic about Burushaski passivation is the more or less idiosyncratic nature of the phonological correspondence between active (ergative) and passive verbs. There does not really exist *one* morphologically productive process which relates the two voices, but distinct competitive ones that have to be lexically specified. This relationship partakes more of morphological derivation than of inflexion. Speakers must apparently learn for each verb whether the two voices are phonologically identical as in *bisárk-* 'to harvest/to be harvested' or whether the passive form takes the prefix *d-* as in *cá-* 'to dam up, to impound (water)' ~ *du-cá-* 'to be impounded'. Lexical idiosyncrasy is even stronger than this simple choice. The quality of the epenthetic vowel following *d-* is not always phonologically predictable, neither are some of the alternations found after this prefix *d-*, e.g. *biráq-* 'to dig' ~ *du-míraq-* 'to be digged', *gaṭámur-* 'to soften (hide)' ~ *du-káṭamur-* 'to be softened', *d-girgin-* 'to leave (sth.) in disorder' ~ *d-írgin-* 'to be left in disorder'. And finally, although many passives with the prefix *d-* have no complement prefix, some of them do, and this also must be lexically specified, e.g. in *-kháči-* 'to stable (cattle)' ~ *d-khači-* 'to be stabled'.

The lexical nature of such correspondence is not surprising, if one con-

siders the lexical status of Burushaski verbs. They form a relatively small closed class, with some of them used as operator verbs in a very large number of periphrastic expressions. These expressions, indeed, constitute the only productive process in the language for the introduction of new verbal forms. Two of the operator verbs *-t-* 'to do' and *-mán-* 'to be' productively participate in the active:passive correspondence by allowing lexical pairs such as *band -t-* 'to close, to tie' ~ *band -mán-* 'to be closed, to be tied'. The correspondence in this case is not only lexical, it is completely suppletive (cf. also Berger 1974: 53).

Passivation in Burushaski thus diverges from that of many other languages in lacking a productive morphological process relating an active verb to its passive counterpart (a feature not explicitly required by Shibatani in his characterization of the passive prototype). In most transformational accounts (e.g., Chomsky, 1981), the passive construction in Burushaski would have to receive a completely distinct interpretation from that of languages like English where the relationship is morphologically regular, although they otherwise are quite similar. In a lexical analysis such as Bresnan's (1982b), on the other hand, Burushaski passives would differ only minimally from those of such languages, by lacking a unique morphological process relating active and passive verbs. In that sense, Burushaski offers additional support to Bresnan's thesis that passivation should primarily be viewed as a lexical-morphological operation, and not a syntactic one.

9.3. The pathetive construction also shares many characteristics of the passive prototype. Pathetive sentences are superficially identical to ergative ones, except that the ergative NP is not a subject but an oblique complement, and the absolutive NP not an object, but a subject. The primary pragmatic function of the pathetive construction is clearly one of defocusing the agent, if subjects are the NPs with the highest focus (*cet. par.*), as proposed by Shibatani. The fact, though, that it is restricted to verbs with inanimate a-agents (and constitutes then the preferred form for some speakers) shows that the pragmatic nature of the defocusing is different from that of the passive construction. Passivation appears to be an *option* used in order to bring about the defocusing. The pathetive construction may only be a *substitute* for the ergative one when the a-agent is inanimate, i.e. when this argument does not carry the archetypical properties of agents. In languages such as Japanese or Turkish, non-typical agents such as natural forces (earthquake, fire, accidents, etc.) cannot be the subject of transitive verbs such as *kill*; sentences such as *The recent fire killed seventeen persons* would have to be expressed as *Seventeen persons died with [INST case] the recent fire* (Shibatani, p.c.). The existence of a pathetive construction, in which the inanimate a-agent is defocused, may be motivated by similar contraints.

The semantic properties of the passive prototype are also respected: the semantic valence of a pathetive verb contains both an agent and a patient, and the grammatical subject is clearly affected. The syntactic properties, however, are slightly different from those of the prototype. The a-patient, as expected, appears as a grammatical subject, but the a-agent is encoded as an oblique complement (and is not suppressed as in the prototype). It follows from it that the valence is unchanged.

Finally, the observations concerning the morphological properties of passives are also valid for pathetives. Pathetive verbs have a typically intransitive diathesis, contrary to ergative ones. Unlike the relationship between ergative verbs and their passive forms, which was essentially lexical, the one between ergative and pathetive verbs is completely transparent: both verbs have the same stem, and they differ only by their diathesis, a distinction which does not have to be lexically specified.

9.4. We conclude this discussion by examining the relationship between these two constructions and other constructions with which they are often related in other languages.

Passive and pathetive constructions are not related to reflexive or reciprocal constructions, which use the pronominals *-khár* '-self-' and *-hán* 'one another', e.g. *né-e i-khár é-sqan-i* [he-ERG him-self$_{ABS}$ 3SG X COMPL-kill PRET-3SG MASC SUBJ] 'he killed himself', *go-khár é-sqan* [your-self$_{ABS}$ 3SG X COMPL-kill IMP 2SG SUBJ] 'kill yourself!'. We do not know of any specific construction for spontaneous, potential and honorific expressions in Burushaski with which we would compare them. They are not related to plural marking either. Although, as we saw in the example (3), some 3PL verbs may take an indefinite meaning whose function is close to that of passives, this process is unrelated to either passive or pathetive constructions.

The existence of impersonal passives or pathetives is a delicate question. Impersonal passives may probably be ruled out, as their absence in our large corpus of passives is probably not accidental. The existence of impersonal pathetives, however, cannot be so excluded. Most verbs in our relevant data have a singular Y inanimate agent, which triggers the same agreement as one should probably find in an impersonal pathetive construc-

tion. In the examples (23a), (24a), and (25a) for instance, the auxiliary *duá* need not agree with the agent, but may rather indicate an impersonal construction (probably marked with a 3SG Y subject suffix). If *duá* were also possible with a plural agent, as in (22a), this would show without ambiguity that impersonal pathetive constructions are possible.

10. Conclusion

10.1. In this paper we have presented new data showing that Yasin Burushaski, and probably also the other dialects of Burushaski, has two specific constructions — called here passive and pathetive — both of which correspond closely to the passive prototype proposed by Shibatani (1985). The passive construction embodies all of the prototypical characteristics. It is nevertheless unlike passive constructions in many other languages in that the relationship between ergative (i.e. transitive active) and passive verbs is not expressed by a single morphological process. Instead this relationship should be more properly called lexical. Nevertheless the correspondence is quite systematic: to each basic ergative verb in the language corresponds almost always a passive one. This correspondence regularly extends to periphrastic expressions, through the interplay of two operator verbs *-t-* for ergative and *-mán-* for passive. The pathetive construction satisfies less of the prototypical characteristics in regularly encoding the agent. Furthermore its domain is much more restricted: it is possible only with inanimate a-agents and non human patients.

Previous descriptions of Burushaski did not focus on such systematic correspondences. This could explain why one could have denied the existence of a passive in that language (Bashir 1985:5).[27] It must be asked, however, why such descriptions failed to highlight such correspondences. The reason lies, we think, in the absence of a unique morphological process, which often characterizes passives in other languages. Perhaps, Shibatani's prototypical definition should explicitly contain a specific provision requiring, not only that passive verbs receive a morphological marking, but also that such marking be 'transparent'. In this way, Burushaski passives could be said to be less 'typical' than those of English, for instance.

10.2. These facts relate to three major debates concerning (i) the status of passive constructions, (ii) the formal characterization of passivation in linguistic theory, and (iii) the relation between passive and ergative constructions.

They do not contribute essentially to the first of these debates, and in particular to the question whether passivation should be primarily viewed as a pragmatic operation whose main function is agent defocusing as Shibatani proposes, or as a syntactic one whose main function concerns diathesis, i.e. the assignment of the function SUBJ to the a-patient, as argued by Perlmutter and Postal (1977),[28] or the binding of the a-agent (resulting in its not being encoded, or having an OBL function). Both passive and pathetive constructions in Burushaski will be viewed as passive, from both the pragmatic and syntactic perspectives.

Although we said little about the formal characterization of passivation in linguistic theory, we saw that the facts of Burushaski appear to favor a lexical approach such as Bresnan (1982b) over a transformational one such as Chomsky (1981).

Finally, they show that one cannot claim that languages having an ergative construction will necessarily lack passivation. This statement, of course, is only valid given previously accepted definitions of ergative construction and passivation. Mel'čuk (1978) shows that the prevalent concept of ergative construction covers at least two radically different constructions which he calls 'ergative$_M$' and 'pathetive$_M$' (we have added subscripts here to identify specific authors). When Tchekoff (1978) proposes a definition of 'ergative$_T$' which excludes the possibility for a verb to have both an ergative$_T$ and a passive diathesis, one must conclude that Burushaski sentences such as (1) would not be ergative$_T$. This is simply a question of definition. It is not impossible, however, that ergative$_T$ and pathetive$_M$ constructions overlap to a large extent. A genuine empirical question would then be: are pathetive$_M$ and passive constructions mutually exclusive in languages without ergative$_M$ construction?

ACKNOWLEDGEMENTS

This research has been supported in part by the Social Sciences and Humanities Research Council of Canada. We would like to thank here Professors Masayoshi Shibatani and Igor Mel'čuk for many helpful comments on an earlier version of this text. The latter informed us that he would not call 'pathetive' the construction described here, although it formally meets his definition.

NOTES

1. It is not obvious, however, that this author would exclude a 'non syntactic' passive in Burushaski.

2. This is particularly evident in her discussion on Tongian: "on se rappelle qu'une de nos exigences méthodologiques était d'examiner si l'énoncé de construction ergative de base ne formait pas couple oppositionnel d'orientation actif ~ passif du prédicat. Si c'était le cas, celui-ci perdait la neutralité que nous attribuons au prédicat d'une construction ergative" (p. 69) [one should recall that one of our methodological requirements consisted of determining whether a basic ergative construction excluded the double passive ~ active opposition of its predicate. If it did not, it lacked the neutrality that we require of the predicate of an ergative construction].

3. Cf., e.g. DeLancey (1981), Dixon (1979), Wagner (1978).

4. Field work for this research was conducted in 1975, 1978, and 1979 in Yasin, Pakistan. We would like to thank here wholeheartedly our many informants, and more particularly Dada Khan, chaukidar of the Yasin Rest-house, his brother Baba Khan, wakhil in Gilgit, Iqbal Hussein from Darkoṭ, student in veterinary medicine, and Qorban Ali from Sandi, student in medicine.

5. Verbs constitute a relatively small closed class. Periphrastic verbal expressions consisting of a noun or adjective followed by one of the operator verbs *-́t-* 'to do', *d-́l-* 'to strike', *-mán-* 'to become', etc., make up for this limitation and include all recent formations.

6. Work on Hunza Burushaski was conducted in Montréal with the collaboration of Mr. Nasir Uddin Hunzai in 1980 and 1982, to whom we want to acknowledge here our deepest gratitude.

7. There is, however, syncretism between ergative and genitive markers, except for feminine nouns and the 2SG pronoun.

8. It should be recalled that PRET is the traditional terminology, but may be better understood as "aorist" (cf. Tiffou and Pesot 1986).

9. A form of ergativity split is found in Hunza Burushaski — but to far less an extent as has been reported by Lorimer (1935:64) and assumed in all studies based on his work, but apparently not in the Yasin dialect which concerns us here (cf. Tiffou and Morin 1982).

10. The only exception is the impersonal verb *d-ɨ-ya* D-3SG MASC COMPL-come PRET '(he) came' which lacks a subject suffix; this verb is also exceptional in many other ways.

11. The hierarchy is actually slightly more complex, but this formulation is sufficient here.

12. Thus in some rare cases, all three affixes may be referentially independent, e.g. *móo-gal-ja-i* '3SG FEM COMPL-AFF break PRET-PL OBJ-3SG MASC SUBJ = he had her break them'.

13. Although the presence of a complement prefix strongly correlates to the semantics of the verb (cf. Bashir 1985:13-18 for Hunza B.), it is not completely predictable. For instance, *-wál-* and *gía-* are two suppletive stems of the verb 'to fall', also found as an operator verb in periphrastic expressions: *gía-* can only have plural subjects of (all genders), while *-wál-* is used (i) for singular non-human X subjects and (ii) both singular and plural human subjects. For plural human subjects, therefore, one has the choice for either *-wal-*, which has a complement prefix and *gía-*, which does not, as appears in the example below:

(a) i. *ílji* *u-wál-um* *ba-n*
behind 3PL FEM COMPL-fall PRET-PTCPL be-3PL FEM SUBJ

ii. *ílji* *gía-m* *ba-n*
behind fall PRET-PTCPL be-3PL FEM SUBJ
'They became pregnant'

14. Actually, the characterization of the absolute construction above is deceptively too simple; semantically, it involves some form of variable quantification, roughly '(Ex) EAT <(SUBJ), x >' in predicate calculus.

15. Although Burushaski knows four genders, MASC, FEM, X, and Y (to use the terminology first introduced by Lorimer, 1935), there is frequent syncretism between the four in most simple tenses, this is why we will frequently use periphrastic tenses, where the auxiliary unambiguously distinguishes all 3rd persons, except 3PL MASC and 3PL FEM. It should be recalled, however, that the constructions studied here are not limited to these tenses.

16. Stress falls on the suffix for this verb, which is indicated here with a stressed hyphen *-́*.

17. We sometimes include in the list of basic verbs some which — like *-́ser-* — have a low stressed or long stressed prefix complement, which historically may have been causative or affective forms of simpler verbs that no longer exist in the language. A finer analysis may require that these should be distinguished, but we have yet no reason to do so.

18. Sentence (9b) could also mean 'she engaged his daughter (to her son)'; but this interpretation is not socially likely as the agent is normally a man.

19. The verb *γol-́* 'to burn (intr.)' has a non characteristic causative *-γól-* and a regular causative *-́sqol-*, both of which meaning 'to burn (sth.)'.

20. Both Lorimer (1935, I:226) for Hunza Bu. and Berger (1974: 32) for Yasin Bu. admit that they have been unable to find a common element of meaning associated to *d-* in the language in its current state. Bashir (1985: 19) argues that 'the *d-* prefix functions, at the most general level, to distinguish process/state/result-oriented verbal conceptions from actor-oriented ones' in Hunza Bu. which could account for many of its uses in Yasin Bu. as well. For instance, we were able to observe a contrast between *phàan-* 'to burst out, to overflow' and its variant *du-phàan-*. The subject of the first one, but not of the second could be emphasized with *ɨya* '(by) itself': *cel ɨya phàani* 'the water overflew by itself' but not **cel ɨya du-phàani*, only *cel du-phàani* 'the water overflew.' This result follows if *ɨya* is interpreted as a means to emphasize the actor, which cannot then cooccur with *d-*.

It is doubtful, however, that all *d-* prefixes are synchronically analyzed as such, in view of the reanalyses noted above: if the meaning of *d-* were completely transparent to the users, there would be no reason for them to reinterpret it as part of the stem.

21. Cf. the previous note. Bashir (1985), however, associates the process/state/result orientation to the *d-* prefix, while here, it would also extend to unprefixed passives, which behave like prefixed ones with that respect.

22. As we mentioned before, we mostly restricted our investigation to periphrastic tenses, as this allowed us to be certain that the subject of the sentence was indeed the absolutive non human X or Y NP, and not some implicit human agent. Therefore, we do not know whether this tense constraint extends to the non periphrastic future tense also built on the present stem.

23. Morin and Tiffou (1983) assumed that ablative oblique complements in the passive construction were limited to animate agents. Further analysis of the data shows that it need not be. All cases where inanimate ablative agents were refused can be explained by semantic selectional restrictions. On the other hand, examples such as (19) above, show that this restriction does not hold for simple sentences, and probably neither for passive ones. Another example is provided by *-khâran-* 'to be late', which allows a *d-* prefix in *du-khâran-* translated to us as 'to be delayed' (this verb, however, has often been described as a Hunzaism by our informants, and appears to be unknown by some). A spontaneous example of the later was (a), which includes an inanimate ablative complement:

(a) *ne* *hir* *harâlt-cum* *du-khâran-i*
the MASC man ABS rain Y-ABL D-belate PRET-3SG X SUBJ
'The man was delayed by the rain'

24. Actually, we have no way to decide whether the NP in this construction has an ergative or a genitive marker. As we mentioned earlier, the markers for both cases are always identical, except for feminine nouns and 2sg pronouns, which cannot be used here as we will see later (condition a). We have arbitrarily chosen to call them ergative here.

25. Morin and Tiffou (1983) assumed a complete analogy between the oblique complements of both passive and pathetive constructions, which a more cautious reading of the collected data does not necessarily warrant.

26. This test is only relative, as the opposition between prefixed and unprefixed passive is not strict. One of our informants who often allowed both prefixed and unprefixed passives for the same verb declared sentence (a) below 'acceptable' — where *-xâurt-* is not necessarily a pathetive verb — even though he accepts *du-xâurt-* as a passive:

(a) *?hír-cum* *bál* *xâurt-um* *duá*
man-ABL wall Y ABS scratch PRET-PTCPL be 3SG Y SUBJ
'The wall has been scratched by the man'

27. One should recall that this author only claims that Burushaski lacks a 'syntactic passive' contrary to English which has a 'syntactic passive'. The concept of 'syntactic passive', however, is neither defined nor self-evident. It probably depends essentially on one's syntactic model. Thus Bresnan (1982b), for instance, essentially claims that passivation in English is not a syntactic operation, but a morphological one, defined in the lexicon, which would support the claim that English as well lacks a 'syntactic passive.'

In this sense, a prototypical definition of passive as proposed by Shibatani, which minimally depends on specific syntactical theories, and allows constructions to be gauged against it proves to be much more valuable.

28. The actual definition of diathesis in Perlmutter and Postal's analysis derives from more primitive concepts which include different strata and promotions of grammatical functions from one stratum to the following one, etc.

REFERENCES

Bashir, Elena. 1985. "Toward a semantics of the Burushaski verb". In: *Proceedings of the Conference on Participant Roles: South Asia and Adjacent Areas*, Arlene R.K. Zide, David Magier, and Eric Schiller (Eds.), 1-32. Bloomington, Indiana: IULC.

Berger, Hermann. 1974. *Das Yasin Burushaski*. Wiesbaden: Otto Harrassowitz.

Bresnan, Joan (Ed.). 1982a. *The Mental Representation of Grammatical Relations*. Cambridge, MA: MIT Press.

-----. 1982b. "The passive in lexical theory", in Bresnan (1982a), 3-86.

Chomsky, Noam. 1981. *Lectures on Government and Binding*. Dordrecht: Foris.

DeLancey, Scott. 1981. "An interpretation of split ergativity and related patterns". *Language* 57:626-657.

Dixon, R.M.W. 1979. "Ergativity". *Language* 55:59-138.

Givón, Talmy. 1979. *On Understanding Grammar*. New York: Academic Press.

Kaplan, Ronald M. and Joan Bresnan. 1982. "Lexical-functional grammar: a formal system for grammatical representation", in Bresnan (1982a), 173-281.

Lorimer, D.L.R. 1935 and 1937. *The Burushaski Language* (3 vols). Oslo: H. Aschehoug.

Martinet, André. 1959. "Review of 'Subject and Predicate' (Manfred Sandmann)". *Bulletin de la Société de Linguistique de Paris* 54(2):42-45.

-----. 1962. "Le sujet comme fonction linguistique et l'analyse syntaxique du Basque". *Bulletin de la Société de Linguistique de Paris* 57.

Mel'čuk, Igor. 1978. "Toward a definition of the concept 'ergative construction'". In: *Proceedings of the XIIth International Congress of Linguists*, Wolfgang Dressler and Wolfgang Meid (Eds.). Innsbruck: Institüt fur Sprachwissenschaft der Universität Innsbruck.

-----. 1979. *Studies in Dependency Syntax*. Ann Arbor: Karoma.

Morin, Yves-Charles and Étienne Tiffou. 1983. "Les tournures passives en Bourouchaski". In: *Proceedings of the XIIIth International Congress of Linguists*, Shirô Hattori and Kazuko Inoue (Eds.), Tokyo.

Okutsu, Keiichiro. 1983. "Why passsive? — A case study from the point of view of empathy". *Kokugogaku* 132:65-80.

Perlmutter, David and Paul Postal. 1977. "Toward a universal characterization of passivization". *BLS* 3:394-417.

Shibatani, Masayoshi. 1985. "Passives and related constructions: a prototype analysis". *Language* 61:821-848.

Tchekhoff, Claude. 1978. *Aux fondements de la syntaxe: l'ergatif*. Paris: PUF.

Tiffou, Étienne. 1977. "L'effacement de l'ergatif en bourouchaski". *Studia Linguistica*. 31:1.18-37.
-----. 1984. "La classe et le genre: aspects actuels du problème". *Contrastive Linguistics* 9(2):48-55. Sofia.
Tiffou, Étienne and Yves-Charles Morin. 1982. "A note on split ergativity in Burushaski". *Bulletin of the School of Oriental and African Studies* 45:88-94.
Tiffou, Étienne and Jürgen Pesot. 1986. "Contes de Yasin: introduction au bourouchaski de Yasin". To appear. Paris: SELAF.
Wagner, H. 1978. "The typological background of the ergative construction." In: *Proceedings of the Royal Irish Academy* (Dublin) 78(C.3):37-74.

Mam voice

Nora C. England
University of Iowa

Mam is an Eastern Mayan language of the Mamean branch, spoken by over 450,000 people in Western Guatemala and Chiapas, Mexico (Kaufman, 1974).[1] Like other Mayan languages it has an ergative pattern of agreement between NP's and verbs, morphologically marked on the verb. It also has syntactic rules which are responsive to the ergative system (England, 1983a). Changes in voice occur through the use of an *antipassive*, with several different functions, or through the use of four (or possibly five) different *passives*, several with primarily lexical rather than syntactic functions (England, 1983b).

1. ERGATIVITY

Mam cross-references the principal arguments of the sentence (transitive subject, herein called A; transitive object (patient), herein called O; intransitive subject, herein called S) on the verb through two sets of prefixed person markers. One of these, the ergative, functions as A and also, when prefixed to nouns, marks noun possession. The other set, the absolutive, marks S and O functions on the verb. There are additionally two similar sets of person markers which function with nonverbal predicates (statives and locative/existentials) and which closely resemble the absolutive person markers. Mam only distinguishes four persons through the prefixes, but these in combination with person enclitics define a seven-way person system:[2]